

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1. (Currently amended) An isolated, purified, or recombinant nucleic acid comprising a polyketide modifying gene, wherein said gene encodes a polyketide modifying enzyme selected from the group consisting of MegR, ~~Meg F, Meg K~~, MegCIV, MegCV, MegBVI, MegBIII, MegL, and MegM, wherein MegR has the sequence encoded by nucleotides 52-942 of SEQ ID NO:1, MegCIV has the sequence encoded by nucleotides 3893-5098 of SEQ ID NO:1, MegCV has the sequence encoded by nucleotides 2386-3855 of SEQ ID NO:1, MegBVI has the sequence encoded by nucleotides 5095-6558 of SEQ ID NO:1, MegBIII has the sequence encoded by nucleotides 12316-13548 of SEQ ID NO:1, MegL has the sequence encoded by nucleotides 14908-15972 of SEQ ID NO:1, and MegM has the sequence encoded by nucleotides 13928-14911 of SEQ ID NO:1).

Claim 2. (Original) The nucleic acid of Claim 1, wherein said gene encodes a polyketide modifying enzyme selected from the group consisting of ~~MegF, MegK~~, MegCV, MegCIV, and MegBVI.

Claim 3. (Original) The nucleic acid of Claim 1, wherein said gene encodes a polyketide modifying enzyme selected from the group consisting of ~~MegF, MegBIII, MegM, and MegL~~.

Claims 4-15. (Canceled).

Claim 16. (Original) An expression vector comprising the nucleic acid of claim 1.

Claim 17. (Original) A host cell comprising the nucleic acid of claim 1.

Claims 18-20: (Canceled).

Claim 21. (Original) A method of producing a modified polyketide, said method comprising culturing a recombinant cell comprising a nucleic acid of claim 1 under conditions in which the cell expresses a product of a gene encoded by the nucleic acid of claim 1, and under conditions in which the unmodified polyketide is present, thereby producing the modified polyketide.

Claim 22. (Original) The method of claim 21 wherein said cell further comprises a recombinant nucleic acid encoding at least one module of a polyketide synthase.

Claim 23. (Canceled).

Claims 24. (New) The nucleic acid of claim 1 that encodes the MegL protein and/or the Meg M protein.

Claim 25. (New) The nucleic acid of claim 24 that does not comprise the *S. erythraea* Meg CII gene (nucleotides 6962-8038 of SEQ ID NO:1) and/or does not comprise the *S. erythraea* MegBIII gene (nucleotides 12316-13548 of SEQ ID NO:1).

Claim 26. (New) The nucleic acid of claim 24 that does not comprise the *S. erythraea* Meg CII gene (nucleotides 6962-8038 of SEQ ID NO:1).

Claim 27. (New) The nucleic acid of claim 24 that does not comprise the *S. erythraea* MegBIII gene (nucleotides 12316-13548 of SEQ ID NO:1).

Claim 28. (New) The nucleic acid of claim 24 that encodes the MegBVI enzyme.

Claim 29. (New) The nucleic acid of claim 28 that encodes the MegBVI enzyme.

Claim 30. (New) An expression vector comprising the nucleic acid of claim 25.

Claim 31. (New) A host cell comprising the nucleic acid of claim 30.